

ABSTRACT OF THE DISCLOSURE

An apparatus and method for determining a next hop address using a unified cache.

The apparatus includes an on-off-link determining unit that determines whether a destination node is onlink or offlink based on a unified cache storing information on nodes connected to a predetermined network, an onlink equal address entry detecting unit that detects from the unified cache an entry storing a network layer address that matches a network layer address of the destination node determined as onlink, and a first link layer address determining unit that determines a link layer address stored in the entry detected by the onlink equal address entry detecting unit as a link layer address of a next hop node.